

WHAT IS CLAIMED IS:

1. A method for lubricating a container or a conveyor for
2. transporting a container, the method comprising applying a curable composition to at
3. least a portion of the container or at least a portion of a conveyor part that comes into
4. contact with the container and non-thermally and non-radiatively curing the curable
5. composition to form a cured, substantially water-repellent, lubricating coating on at
6. least a portion of the container or conveyor part, the curable composition comprising
7. at least one hydrophobic polymer and at least one wax.
1. 2. The method of claim 1, wherein the cured coating comprises at
2. least 10 weight percent wax based on the solid material content of the coating.
1. 2. 3. The method of claim 1, wherein the cured coating comprises
2. greater than 50 weight percent wax based on the solid material content of the coating.
1. 2. 3. 4. The method of claim 1, wherein the cured coating comprises at
2. least 40 weight percent of the at least one hydrophobic polymer based on the solid
3. material content of the coating.
1. 2. 5. The method of claim 1, wherein the at least one hydrophobic
2. polymer comprises a polyurethane.
1. 2. 6. The method of claim 1, wherein the at least one hydrophobic
2. polymer comprises an alkali soluble resin.
1. 2. 7. The method of claim 6, wherein the alkali soluble resin
2. comprises acrylic monomers, styrenic monomers or a mixture of acrylic and styrenic
3. monomers.
1. 2. 8. The method of claim 1, wherein the curable composition
2. comprises a fluoropolymer.

1 9. The method of claim 1, wherein the curable composition
2 comprises a mixture of two hydrophobic polymers, and further wherein one of the
3 hydrophobic polymers is an alkali soluble resin.

1 10. The method of claim 1, wherein the wax comprises carnauba
2 wax.

1 11. The method of claim 1, wherein the curable composition
2 further comprises at least one additive selected from defoaming agents, anti-microbial
3 agents, pigments, surfactants, wetting agents, and Zn oxide.

1 12. The method of claim 1, wherein the container is a plastic
2 container.

1 13. The method of claim 1, wherein the container is a glass
2 container.

1 14. The method of claim 1, wherein the container is a metal
2 container.

1 15. The method of claim 1, wherein the container is a paper or
2 ceramic container.

1 16. The method of claim 1 further comprising reapplying the
2 curable composition to at least a portion of the conveyor part or the container to repair
3 the lubricating coating.

1 17. The method of claim 1, wherein the curable composition is
2 applied to at least a portion of the conveyor part that comes into contact with the
3 container and the cured, substantially water-repellent, lubricating coating is formed on
4 at least a portion of the conveyor part.

1 18. A method for lubricating a container or a conveyor for
2 transporting a container, the method comprising applying a curable composition to at
3 least a portion of the container or at least a portion of a conveyor part that comes into

4 contact with the container and non-thermally and non-radiatively curing the curable
5 composition to form a cured, substantially water-repellent, lubricating coating on at
6 least a portion of the container or the conveyor part, wherein the cured coating, as
7 applied, has a coefficient of friction of less than 0.15, as measured by a short track
8 conveyor test.

1 19. The method of claim 18, wherein the curable composition
2 comprises at least one hydrophobic polymer and at least one wax.

1 20. The method of claim 18 wherein the cured lubricating coating,
2 as applied, has a coefficient of friction of less than about 0.14 as measured by a short
3 track conveyor test.

1 21. The method of claim 18, wherein the container is a plastic
2 container.

1 22. The method of claim 18, wherein the container is a glass
2 container.

1 23. The method of claim 18, wherein the container is a metal
2 container.

1 24. The method of claim 18, wherein the container is a paper or
2 ceramic container.

1 25. The method of claim 18 further comprising reapplying the
2 curable composition to at least a portion of the conveyor part or the container to repair
3 the lubricating coating.

1 26. The method of claim 18, wherein the curable composition is
2 applied to at least a portion of the conveyor part that comes into contact with the
3 container and the cured, substantially water-repellent, lubricating coating is formed on
4 at least a portion of the conveyor part.

1 27. A method for lubricating a container or a conveyor for
2 transporting a container, the method comprising applying a curable composition to at
3 least a portion of the container or at least one part of the conveyor that comes into
4 contact with the conveyor and curing the curable composition to form a cured
5 lubricating coating on at least a portion of the container or the conveyor part, wherein
6 the curable composition comprises an alkali soluble resin, at least one additional
7 hydrophobic polymer and at least one wax.

1 28. The method of claim 27, wherein the wax makes up at least 5
2 weight percent of the coating based on the solid material content of the coating.

1 29. The method of claim 27, wherein the wax makes up greater
2 than 50 weight percent of the coating based on the solid material content of the
3 coating.

1 30. The method of claim 27, and wherein the cured lubricating
2 coating, as applied, has a coefficient of friction of less than 0.15, as measured by a
3 short track conveyor test.

1 31. The method of claim 27, wherein the container is a plastic
2 container.

1 32. The method of claim 27, wherein the container is a glass
2 container.

1 33. The method of claim 27, wherein the container is a metal
2 container.

1 34. The method of claim 27, wherein the container is a paper or
2 ceramic container.

1 35. The method of claim 27 further comprising reapplying the
2 curable composition to at least a portion of the conveyor part or the container to repair
3 the lubricating coating.

1 36. The method of claim 27, wherein the curable composition is
2 applied to at least a portion of the conveyor part that comes into contact with the
3 container and the cured, lubricating coating is formed on at least a portion of the
4 conveyor part.

1 37. The method of claim 27, wherein the alkali soluble resin has a
2 number average molecular weight of no more than about 20,000 and the at least one
3 additional hydrophobic polymer has a number average molecular weight of at least
4 about 30,000.

1 38. The method of claim 37, wherein the ratio of the alkali soluble
2 resin to the at least one additional hydrophobic polymer is from about 70:30 to 30:70.

1 39. A conveyor for transporting a container, at least a portion of a
2 part of the conveyor coated with a cured lubricating coating formed by applying a
3 curable composition to at least a portion of the conveyor part that comes into contact
4 with the container and non-thermally and non-radiatively curing the curable
5 composition to form a cured, substantially water-repellent, lubricating coating on at
6 least a portion of the conveyor part, the curable composition comprising at least one
7 hydrophobic polymer and at least one wax.

1 40. A container for transport on a conveyor, at least a portion of the
2 container coated with a cured lubricating coating formed by applying a curable
3 composition to at least a portion of the container that comes into contact with the
4 conveyor and non-thermally and non-radiatively curing the curable composition to
5 form a cured, substantially water-repellent, lubricating coating on at least a portion of
6 the container, the curable composition comprising at least one hydrophobic polymer
7 and at least one wax.

1 41. A conveyor for transporting a container, at least a portion of a
2 part of the conveyor coated with a cured lubricating coating formed by applying a
3 curable composition to at least a portion of the conveyor part that comes into contact
4 with the container and non-thermally and non-radiatively curing the curable
5 composition to form a cured, substantially water-repellent, lubricating coating on at

6 least a portion of the conveyor part, wherein the coating, as applied, has a coefficient
7 of friction of less than 0.15, as measured by a short track conveyor test.

1 42. A container for transport on a conveyor, at least a portion of the
2 container coated with a cured lubricating coating formed by applying a curable
3 composition to at least a portion of the container that comes into contact with the
4 conveyor and non-thermally and non-radiatively curing the curable composition to
5 form a cured, substantially water-repellent, lubricating coating on at least a portion of
6 the container, wherein the coating, as applied, has a coefficient of friction of less than
7 0.15, as measured by a short track conveyor test.

1 43. A conveyor for transporting a container, at least a portion of a
2 part of the conveyor coated with a cured lubricating coating formed by applying a
3 curable composition to at least a portion of the conveyor part that comes into contact
4 with the container and curing the curable composition to form a cured lubricating
5 coating on at least a portion of the conveyor part, wherein the curable composition
6 comprises an alkali soluble resin, at least one additional hydrophobic polymer and at
7 least one wax.

1 44. A container for transport on a conveyor, at least a portion of the
2 container coated with a cured lubricating coating formed by applying a curable
3 composition to at least a portion of the container that comes into contact with the
4 conveyor and curing the curable composition to form a cured lubricating coating on at
5 least a portion of the container, wherein the curable composition comprises an alkali
6 soluble resin, at least one additional hydrophobic polymer and at least one wax.